

ADMINISTRATION 8430.21A

3/3/86

FLIGHT STANDARDS DIVISION, AIRCRAFT CERTIFICATION DIVISION, AND SUBJ: AIRCRAFT EVALUATION GROUP RESPONSIBILITIES

- 1. <u>PURPOSE</u>. This order provides supplemental instructions and guidelines for regional Flight Standards Divisions, Aircraft Certification Divisions, and Aircraft Evaluation Groups assigned aircraft certification and operational evaluation responsibilities. This order will also serve to clarify regional responsibilities for supporting and administering these programs.
- 2. <u>DISTRIBUTION</u>. This order is distributed to the division level in the Offices of Civil Aviation Security and Aviation Safety; to the branch level in the Office of the Associate Administrator for Aviation Standards and the Offices of Flight Standards and Airworthiness; to the branch level in regional Flight Standards Divisions, and Aircraft Certification Divisions; to all Flight Standards Field Offices; to all Aircraft Certification Field Offices; and to all Aircraft Evaluation Groups.
- 3. <u>CANCELLATION</u>. Order 8430.21, Flight Standards Division and Aircraft Evaluation Group Responsibilities, dated September 13, 1984, is cancelled.

#### 4. BACKGROUND.

ORDER

- a. The Aircraft Certification Directorate system was established by Order 8000.51, Aircraft Certification Directorates, dated February 1, 1982. To fully implement the directorate concept, a realignment of certain functions previously performed by Flight Standards Divisions in the regions and the Air Transportation and Aircraft Maintenance Divisions in FAA headquarters was necessary. Formerly, aircraft certification functions were performed in and by each respective region's Flight Standards Division with operational responsibilities for Flight Operations Evaluation Boards (FOEB's), Flight Standardization Boards (FSB's), and Maintenance Review Boards (MRB's) handled by the same division with the assistance of board members from regions having operators placing the new aircraft in service.
- b. Since the establishment of the Aircraft Certification Directorates, the role of the Flight Standards Division at each directorate headquarters has been to provide, through its Aircraft Evaluation Group (AEG), all applicable Flight Standards technical services to the directorates. Order 1100.5B, FAA Organization Field, contains the AEG mission and functional statements, and specifies responsibility for establishing and conducting operations and maintenance technical boards.
- c. Order 8430.6C, Air Carrier Operations Inspector's Handbook, and Order 8300.9, Airworthiness Inspector's Handbook, contain current instructions and guidelines for the AEG's concerning the various operations and maintenance boards and complement other guidance concerning the directorate system.

Distribution: A-W(CS/SF)-2

Initiated By: AFS-260

8430.21A 3/3/86

These programs encompass all aircraft manufactured in the United States and such foreign-manufactured aircraft certificated for operation by U.S. air carriers and operators.

- d. The requirement for the operations boards and associated airworthiness boards continues in importance and remains essentially intact except for changes that have occurred as a result of restructuring of the boards' tasks and to reflect the agency's reorganization by establishing Aircraft Certification Directorates.
- e. It should be noted that the Engine and Propeller Certification
  Directorate is unique in that its certificated products are incorporated into
  the aircraft certificated by other directorates. The referral to aircraft in
  this order also includes engines and propellers, as appropriate.

## 5. RESPONSIBILITIES.

- a. The Director of Flight Standards has the responsibility and accountability to provide agency guidance concerning national policy, procedures, practices, and standardization related to operational acceptability of new and modified aircraft intended to be operated under the provisions of the Federal Aviation Regulations (FAR).
  - b. Regional Directors of directorate regions are responsible and accountable for implementing the national policy for the AEG function established by the Director of Flight Standards. They provide the necessary resources for the timely accomplishment of the tasks assigned to the AEG recognizing the effect on safety that results from AEG decisions concerning operational acceptability of newly certificated and modified aircraft, as well as pilot qualification, crew training, minimum equipment lists, and continuing airworthiness requirements. The Director of a directorate region is responsible and accountable for the proper and timely accomplishment of all operational and airworthiness aspects associated with the certification of new aircraft, follow-on models, and significant changes to existing aircraft. Therefore, the Regional Director is accountable for ensuring that the FAA position to industry concerning airworthiness and operational requirements is clearly represented as "one FAA." The Director is to ensure that the Manager, Flight Standards Division and the Manager, Aircraft Certification Division work in unison so that the requirements of the applicable operational rules are identified to the Aircraft Certification Office (ACO), manufacturer, and affected operators early in the certification process, and during the service life of the aircraft. While there is no regulatory basis to deny an aircraft type certificate solely on the basis of noncompliance with operational rules, it is imperative that the manufacturer be fully informed as early as possible in the certification process of operational/maintenance requirements which, if not complied with, would render the aircraft operationally unacceptable for use under the provisions of FAR Parts 91, 121, 125, or 135.
  - c. The Director of Flight Standards provides guidance concerning national policy relative to the aircraft operational evaluation program through Order 8430.6C, Air Carrier Operations Inspector's Handbook, Order 8300.9, Airworthiness Inspector's Handbook, and through other agency directives and

Page 2

- \* appropriate letters. The Director of Flight Standards has assigned to the Manager, Air Transportation Division, AFS-200, the responsibility for the review and approval of the FOEB and FSB actions, establishment of national guidance for AEG's, and for providing direction resulting from actions by the Flight Operations Policy Board concerning the aircraft operational evaluation program. The Director of Flight Standards has assigned to the Manager, Aircraft Maintenance Division, AFS-300, the responsibility for the review of MRB reports prior to formal approval and issuance of guidance concerning actions taken by the MRB. AFS-200 coordinates with the General Aviation and Commercial Division, AFS-800, on matters concerning aircraft for which AFS-800 has a specific responsibility.
  - d. Order 8000.51, Aircraft Certification Directorates, established the organization of Aircraft Certification Directorates within the New England Region, Central Region, Southwest Region, and the Northwest Mountain Region. These regions have the authority for establishing AEG's.
- e. Order 1100.5B, FAA Organization Field, sets forth the mission, functions, and responsibilities of the AEG's. To accomplish these objectives, the AEG implements the national guidance, procedures, practices, and standardized guidance provided by the Director of Flight Standards, under the management of the Flight Standards Division Manager of the directorate region.

# \* 6. FLIGHT STANDARDS DIVISION AND AIRCRAFT CERTIFICATION DIVISION RESPONSIBILITIES IN A DIRECTORATE REGION.

- a. Technical services of the AEG are provided by the Flight Standards Division as necessary to support operational consultation, evaluation, certification, implementation, and continued operation and maintenance of the aircraft for which it is assigned responsibility. The managers are responsible for providing needed resources for the timely accomplishment of the AEG's assigned tasks. In the certification process and operational evaluation of an aircraft, it is essential that the ACO and the AEG's responsibilities for operations and airworthiness are managed in such a manner that the agency's position is clearly represented as "one FAA." The placing of a foreign-manufactured aircraft in service requires special attention to ensure that the schedule of events concerning the AEG's responsibilities for the operations and airworthiness boards are coordinated for the most efficient use of available resources. Because of limited resources and the need to complete the operational evaluation of an aircraft prior to it being placed in service, the Manager, Flight Standards Division may delegate to another region, the authority to establish an FOEB and FSB for a particular aircraft.
- b. The Manager, Aircraft Certification Division and the Manager, Flight Standards Division of regions having directorates are jointly responsible for ensuring close liaison between the appropriate ACO and AEG concerning assigned type certification projects involving applications for original, supplemental, or modified aircraft type certificates. This close liaison must begin in the early stages of the type design approval program and continue throughout the service life of the aircraft. Additionally, these managers will take appropriate action to ensure that the aircraft manufacturers and modifiers, particularly those holding delegation option authorization or designated

8430.21A 3/3/86

alteration station authority, understand that the operational evaluations by the AEG are an integral part of the overall certification process and that provisions must be made for AEG personnel to have access to and participate in certain certification phases of new, modified, or follow-on models of aircraft. Certification/evaluation activity schedules will be fully coordinated between the ACO and AEG prior to effecting agreement with the manufacturer.

#### 7. DELEGATED REGION, FLIGHT STANDARDS DIVISION RESPONSIBILITIES.

- The AEG, under the Flight Standards Division in the directorate regions, is responsible for the aircraft operational evaluation program for aircraft assigned to the directorates. Because of the broad scope of this task, it is not practical for the AEG to attempt to complete its aircraft operational evaluation program for all assigned aircraft with existing assigned resources. Accordingly, the AEG's, through coordination between the affected Flight Standards Division managers, may delegate to another region the authority to accomplish the tasks associated with the aircraft operational evaluation program. The Flight Standards Division manager, in regions that have been delegated the authority to establish an FOEB, FSB, or MRB for a particular aircraft, will select and assign the technical resources for the various boards and provide the support necessary to accomplish the program. This delegated authority to accomplish the aircraft operational evaluation program may include U.S.manufactured aircraft. Normally, the region that will be the first to authorize a certificated operator to use the aircraft will be the one to be delegated authority to establish an FOEB, FSB, and MRB. However, the Flight Standards Division of the directorate region and the AEG remain responsible for the timely accomplishment of all delegated functions and will appoint a chairman from the AEG to ensure that the initial and follow-on functions are completed. This includes the responsibility for coordination with the offices concerned so that the requirements of the applicable operational rules are identified to the ACO, manufacturer, and affected operators early in the certification process.
- b. The Flight Standards Division manager of the region assigned the delegated authority is responsible for ensuring that all necessary resources including manpower, travel funds, and time are dedicated to this program. This support is not limited to initial actions of putting a new aircraft in service but includes all the follow-on actions for FOEB/FSB meetings and the necessary coordination with industry and the concerned AEG.
- 8. CERTIFICATE-HOLDING REGION RESPONSIBILITIES. Each region having certificate responsibility for FAR Parts 121, 125, and 135 operators is responsible for providing support to an AEG for the timely accomplishment of the various operations and airworthiness boards' tasks and functions when assistance is requested by the AEG through the Manager, Flight Standards Division of a directorate region. This support, in the form of operations and airworthiness inspectors/specialists, and their associated travel funding is needed particularly in the Northwest Mountain and Central Regions because of the large number of aircraft assigned to the AEG's. Regions, with air carriers who will be the first to place a new aircraft in service, have a direct interest in and responsibility for providing board members to assist in the operational evaluation of an aircraft. These duties include, but may not be limited to serving as a member on the FOEB, FSB, or the MRB. Participation will be highly

Page 4 Par 6

beneficial to the regions in that their personnel will be among the first qualified in the aircraft for which they have assigned certificate responsibility and will have the technical expertise for airman certification or operational and airworthiness functions. Regions are to give high priority to the support of the AEG aircraft operational evaluation program because of the long-term consequences of the boards' actions that affect all U.S.-certificated operators.

### 9. AIRCRAFT EVALUATION GROUP RESPONSIBILITIES.

- a. Aircraft Evaluation Groups are established in regions which have Aircraft Certification Directorates. The AEG's are directly responsible to the Flight Standards Division manager and follow national policy as further supplemented and supported by the region. Basic AEG responsibilities include:
- (1) Aircraft Evaluation Group, ACE-270, Kansas City, Missouri, Central Region Small airplanes and foreign airplanes certificated under FAR Part 23, SFAR 41, and the applicable FARs that were in effect prior to the adoption of Part 23.
- (2) Aircraft Evaluation Group, ANM-270S, Seattle, Washington, and ANM-270L, Long Beach, California, Northwest Mountain Region Transport Category airplanes, Part 25, and foreign-manufactured transport category airplanes.
- (3) Aircraft Evaluation Group, ASW-270, Fort Worth, Texas, Southwest Region Rotorcraft certificated under FAR Parts 27 and 29 and foreign-manufactured rotorcraft.
- (4) Aircraft Evaluation Group, ANE-251, Burlington, Massachusetts, New England Region Aircraft engines and propellers certificated under FAR Parts 33 and 35.
- b. The managers of the AEG's are responsible for the timely accomplishment of the operations and airworthiness programs as assigned in the appropriate sections of Order 1100.5B, FAA Organization Field, the guidelines in Order 8430.6C, Air Carrier Operations Inspector's Handbook, Order 8300.9, Airworthiness Inspector's Handbook, and appropriate regional directives.
- c. AFS-200 and AFS-300 also provide the AEG's with direction concerning Aviation Standards policies relating to program management, standardization, and procedural guidance. AFS-200 coordinates with AFS-800 on matters involving aircraft for which AFS-800 has specific responsibilities.
- d. The AEG's are comprised of operations, maintenance, and avionics air carrier and/or general aviation inspectors who provide technical services in their areas of responsibility on assigned aircraft. This includes operational, maintenance, and avionics consultation and assistance in certification programs, the approval of provisions for continued airworthiness, and operational considerations for assigned aircraft through the management of operations and maintenance boards. The AEG's responsibilities with respect to the various technical boards will vary based on the aircraft assigned to the certification directorate and the amount of activity generated by the aircraft manufacturers and operators.

Page 5

- (1) The following is a list of the technical boards that are established for the purpose of accomplishing specific tasks.
  - (a) Flight Operations Evaluation Boards (FOEB)
  - (b) Maintenance Review Boards (MRB)
  - (c) Flight Standardization Boards (FSB)
  - (d) Type Certification Boards (TCB) (Participation).
  - (e) Flight Manual Review Boards (FMRB) (Participation).
- (2) The AEG manager will assure that all required flight operations board meetings and activities are scheduled when directed by the Flight Standards Division manager, by AFS-200, or when otherwise deemed appropriate. Normally, industry and agency sources are advised of a proposed FOEB meeting 120 days in advance with a request for agenda items to be forwarded no later than 60 days prior to the planned meeting. An agenda is then prepared and distributed to agency and industry sources at least 30 days in advance of the scheduled meeting. Exceptions to the above can be made by the chairman of the FOEB as required by circumstances such as, but not limited to, minimal response by industry to Master Minimum Equipment List (MMEL) meetings.
- e. Because of limited resources, the AEG may delegate the authority for accomplishing the aircraft operational evaluation program for a particular aircraft to another region. In such cases, the AEG should provide management and technical guidance for all FOEB, FSB, and MRB activities, as appropriate. The AEG concerned will provide the chairperson and the region receiving the delegated authority will provide an associate chairperson for the operations boards and, if needed, for the MRB. Aircraft expertise for the boards may be furnished by either the AEG, when personnel are qualified, or the region having the delegated authority when its personnel are scheduled to be among the first group to be trained and qualified in the aircraft. The responsibility for the reports and actions taken by the operations boards remain with the AEG. AFS-200 and AFS-300, as appropriate, must be advised of each case where the delegated authority is exercised.

# f. Additional AEG Responsibilities Include:

- (1) The initial development of MMEL's and the continuing revisions and distribution in accordance with established procedures.
- (2) The receipt, review, and appropriate followup action, as necessary, of assigned aircraft Service Difficulty Reports relating to operation or maintenance of the aircraft.
- (3) Providing the ACO with technical assistance for review and approval of Airplane or Rotorcraft Flight Manuals including supplements, revisions, and Configuration Deviation Lists, when appropriate.
- (4) Participation in the development of Airworthiness Directives relating to operation or maintenance of the aircraft.

3/3/86 8430.21A

(5) Participation in the function and reliability or service flight tests to the extent necessary to evaluate new or modified aircraft types for compatibility with pertinent regulations such as FAR Parts 43, 61, 63, 91, 97, 121, 125, 129, and 135. This also includes pertinent Aviation Standards orders or other service orders related to air traffic, facilities, or airports, ICAO references, FAA advisory circulars related to flight operations or maintenance, and other applicable FAA policies to determine suitability of the aircraft for air carrier service.

- (6) Establishment and maintenance of appropriate liaison with Washington headquarters, regions, and district offices in matters concerning operational evaluation of assigned aircraft.
- (7) Consultation and assistance to directorate and/or Washington headquarters in the development of draft advisory circulars, air carrier operations bulletins and maintenance bulletins that pertain to assigned aircraft types or operating rules.
  - (8) Technical consultation provided to regional Flight Standards Divisions, Branches, or staffs, FSDO's, ACDO's, or GADO's, and POI's, PMI's, and PAI's on all assigned aircraft.
  - (9) Providing expert consultation in support of accident or incident investigations, analysis, and implementation of corrective actions related to the particular aircraft assigned.
  - (10) Conducting initial flight checks on new aircraft for FAA flight test pilots, FAA inspectors, manufacturer test pilots, and, in certain cases, air carrier supervisory pilots.
  - (11) Participating in flightcrew complement determinations and evaluating aircraft for new/common/same type rating in accordance with established procedures.
  - (12) Providing operational consultation to the cognizant ACO and the aircraft manufacturer during the type certification process.
    - (13) Coordinating with the National Simulator Evaluation team on evaluation of data packages for aircraft simulator design, acceptance, and approval.
    - (14) Serving as liaison between manufacturers and field offices for distribution of service bulletins, all operator letters, and maintenance alerts.
- (15) Participating in the operational evaluation of new aircraft systems, instruments, and equipment such as "Head-up Display" (HUD), and effecting coordination with the appropriate FAA certification offices and AFS-200.

(16) Review and acceptance of maintenance programs and intervals associated with FAR 23.1529, 25.1529, 27.1529, and 29.1529 requirements.

Donald D. Engen

Administrator